

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A ~~synthesiser~~ synthesizer comprising:  
a memory, containing a plurality of stored samples;  
means for calculating an output sample for each of a plurality of active voices using a plurality of samples selected from the stored samples for each of the active voices, the number of samples selected being defined as an interpolation degree;  
wherein the interpolation degree depends upon the number of active voices.
2. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in claim 1, wherein the interpolation degree decreases as the number of active voices increases.
3. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in claim 1, wherein the interpolation degree decreases non-linearly as the number of active voices increases.
4. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in ~~one of claims 1 to 3~~ claim 1 wherein the plurality of samples stored in the memory comprise samples of musical notes.
5. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in claim 4 wherein the plurality of samples stored in the memory comprise samples of musical notes produced by different musical instruments.

6. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in any ~~preceding claim~~ claim 1 wherein the means for calculating an output sample is adapted to multiply each selected sample with a respective filter coefficient obtained from a filter table.

7. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in claim 6 wherein the filter table contains coefficients of a truncated sinc function.

8. (Currently Amended) A ~~synthesiser~~ synthesizer as claimed in any ~~preceding claim~~ claim 1, wherein the ~~synthesiser~~ synthesizer is a MIDI 30 music ~~synthesiser~~ synthesizer.

9. (Currently Amended) A portable device, comprising a ~~synthesiser~~ as claimed in any preceding claim synthesizer, said synthesizer including a memory containing a plurality of stored samples;

means for calculating an output sample for each of a plurality of active voices using a plurality of samples selected from the stored samples for each of the active voices, the number of samples selected being defined as an interpolation degree;

wherein the interpolation degree depends upon the number of active voices.

10. (Original) A portable device as claimed in claim 9 wherein the portable device is a mobile 35 phone.

11. (Original) A portable device as claimed in claim 9 wherein the portable device is a pager.

12. (Currently Amended) A method of operating a ~~synthesiser~~ synthesizer having a plurality of samples stored in a memory, the method comprising the steps of:

determining the number of voices that will be active in producing a sound;

determining an interpolation degree on the basis of the number of voices that will be active, wherein the interpolation degree is defined as the number of samples to be selected from the plurality of samples stored in the memory; and

calculating an output sample for each active voice, using the number of said stored samples determined by the interpolation degree.

13. (Original) A method as claimed in claim 12, wherein the interpolation degree decreases as the number of active voices increases.

14. (Original) A method as claimed in claim 12, wherein the interpolation degree decreases non-linearly as the number of active voices increases.

15. (Canceled)

16. (Canceled)